ABSTRACT OF THE DISCLOSURE

A method of software release planning. The method comprises the steps of assigning stakeholder priorities to a set of requirements for software; explicitly defining a set of constraints on the requirements; and operating on the stakeholder priorities with algorithms using a computer, subject to the constraints, to generate at least one release plan solution. Priorities are balanced between priorities of multiple stakeholders, and between the impact of various release plan solutions on project time, overall benefit, and quality of the software. A set of near optimal and maximally distinct solutions is generated.